Chevron
ORTHO
Chevron Chemical Company
Metuchen & Harmich Roads, So. Plainfield, NJ 07080
ORTHO AGRICULTURAL CHEMICALS DIVISION
SEPTEMBER 29, 1981

File P 7-29-82

SPILL PREVENTION CONTROL AND
COUNTER MEASURE PLAN
CHEVRON CHEMICAL COMPANY
SOUTH PLAINFIELD PLANT

FILE: 706.06

1.0 GENERAL

The South Plainfield Plant is a facility for preparing and packaging liquid and solid formulation of pesticides. The plant is located at Metuchen and Harmich Roads, Borough of South Plainfield, Middlesex County, New Jersey. The mailing address and telephone number of the plant are:

P. O. Box 289
South Plainfield, New Jersey 07080-0289
Telephone: (201) 757-1400

The plant is owned and operated by:

Chevron Chemical Company
575 Market Street
San Francisco, California 94105

The plant is normally open for operations from 8:00 A.M. to 12:30 A.M. (16½ hours), starting on Monday and shutting down for weekends at 12:30 A.M. on Saturday. Normal office hours are from 8:30 A.M. to 5:00 P.M., Monday through Friday. The above schedules may not be in effect on certain holidays.

The position responsible for plant operations, including oil spill prevention and control is:

Manager, South Plainfield Plant

The Spill Prevention Control and Counter Measure (SPCC) Plan contained herein shall be observed as an essential part of plant operating instructions.

2.0 REGULATIONS:

2.1 Discharge of Oil

2.11 Title 40, Part 110, Code of Federal Regulations, prohibits the discharge of oil, in harmful quantities into or upon the navigable waters of the United States. A copy of this regulation is appended.

2.12 Title 40, Part 112, Code of Federal Regulations, requires the existence and implementation of an SPCC Plan at facilities which store and transfer oil where it may be reasonably expected that the potential exists for an oil spill to reach navigable waters. A copy of this regulation is appended.

2.2 Discharge of Hazardous Substances

2.21 Title 40, Part 117, Code of Federal Regulations, prohibits the discharge of designated hazardous substances (40 CFR 116), in any 24 hour period, in quantities equal to or exceeding the reportable quantity, into or upon the navigable waters of the United States. A copy of this regulation is appended.

2.22 Title 40, Part 265.51, Code of Federal Regulations, requires the existence and implementation of a contingency plan at all hazardous waste facilities where it may be reasonable expected that a fire, explosion, or unplanned release of hazardous waste may occur to the air, soil, or environment. A copy of this regulation is appended.

2.23 The Discharges of Petroleum and other Hazardous Substances Regulation, N.J.A.C. 7:1E, prohibits the discharge of oil or hazardous substances into the waters of New Jersey.

2.24 The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Superfund), P.L. 96-510, prohibits the release of designated hazardous substances into the environment (air, water, groundwater) in amounts equal to or greater than the reportable quantity.

2.5 Applicability of Regulations

The plant stores and uses materials such as klearol and fuel oil which meet the definition of "oil". Products such as Captan, Diazinon, Malathion, Methoxychlor and waste water are hazardous substances which may require reporting if a spill exceeds specified limits or if the spill threatens human health or the environment. The plant is not located at a site where a spill could escape directly to a continuously flowing stream, a lake, or ocean waters. However, there is a route of storm water drainage from the plant which could conceivably carry a spill, during a period of storm drainage, off the plant premises. It is assumed that such a combination of situations could result in the transport of oil or hazardous waste to navigable waters. This SPCC Plan has been prepared not only to recognize this possibility, but also to reinforce plant practices for prevention of spills as a matter of safe and orderly operations.

3.0 Reporting of Spills

Report the nature of the spill, the material spilled, the estimated volume of the spill, the observed route of escape from the plant premises, the name and telephone number of the reporter, the name and address of the plant, the time of the incident, the extent of injuries if any, and the possible hazards to human health and the environment outside of the facility.

3.1 Reports of all spills shall be made to:

3.11 U. S. Coast Guard
National Response Center
Telephone: (800) 424-8802

3.12 State of New Jersey
Department of Environmental Protection
Telephone: (609) 292-5560 - business hours or
(609) 297-7172 - all other times

3.13 Company 24 hour emergency spill number - (415) 233-3737

3.2 In the case of a hazardous waste spill per 2.3 above, submit an interim form and a GO-140 form to Mr. J. Blickman, Chevron Chemical, San Francisco.

3.3 In the case of a fire, explosion, or hazardous waste spill per 2.4 above, the following people shall also be contacted:

3.31 G. W. Page, Jr.
1209 Maple Hill Road
Westfield, New Jersey 07090
Telephone: (201) 654-7792

Or Gerald L. Romig
1033 Rudyard Drive
Perth Amboy, New Jersey 08861
Telephone: (201) 442-4026

3.32 Company Doctor:

Dr. John Scalera
101 Sampton Avenue
South Plainfield, New Jersey 07080
Telephone: (201) 756-5207

4.0 FUNDAMENTALS OF SPILL PREVENTION

The experience of facilities which store and transfer oil and hazardous substances has shown that errors far out number mechanical failures in spill events. Failure to observe established operating instructions or lack of proper attention to duties has caused spills such as tank overflows. Such spills can and must be prevented by:

1. Observing operating instructions.

2. Keeping alert and paying attention to duties, especially during a transfer.

3. Correcting or promptly reporting to supervision any situation which may threaten a spill.

5.0 FUNDAMENTALS OF SPILL CONTROL

In the event of a spill at the plant, it is essential to:

1. React calmly and promptly. Do not panic or take action which may risk personal injury.

2. Prevent "feeding" of a spill. Stop the flow if it is within your safe control to do so, or notify the person in control of the flow.

3. Notify supervision.

6.0 INSPECTION AND RECORDS

It is the established practice of the plant to carry out numerous inspections and to record both operating data and equipment condition. These inspections and records are to be closely observed in accordance with plant operating standards.

Records of materials received, stored, and used are to be kept up to date in plant operations with the following inspections:

1. Prior to making a transfer from a tank car or tank truck to a holding tank, the holding tank shall be gauged to determine that there is sufficient available volume for the transfer.

2. All tanks and lines shall be visually inspected on days the plant is in operation.

3. All tanks shall be gauged monthly to contirm daily records of materials received, stored and used.

Accurate inspections and recordings of information as noted above are of importance to the prevention of spills and to the safe and orderly conductance of plant operations.

7.0 PERSONNEL TRAINING

It will be the responsibility of plant management and supervisors to instruct personnel in proper procedures to prevent and control spills. These instructions will include a review of the regulations appended to this SPCC Plan. Periodic briefings of personnel are to be made to assure that proper procedures and the provision of this SPCC Plan are observed.

8.0 DRAINAGE

8.1 Plant Grounds

The western plant boundary along Metuchen Road can be considered to run on a north-south line (actually about 33 degrees west of true north). From the western side of the plant buildings, drainage is toward an earthen trough on plant property parallel to Metuchen Road. Rainwater (or melting snow) flows along the trough to the

8.1 Plant Grounds (continued)

South. This trough drains through a culvert under a railroad spur, at approximately the south property boundary. Escape of a spill along this route seems unlikely. As discussed in the following sections, storage and handling facilities are not in this general drainage path. However, the north-south drainage trough should be checked for evidence of oil in the event of a spill.

Drainage from the east side of the plant buildings is generally toward the south along the railroad siding adjacent to the buildings. This is the most likely route for escape of a spill from tank cars which are unloading on the siding. The drainage could be expected to flow toward the culvert under the railroad at the south end of the property described in the above paragraph. Although it is considered unlikely that a spill would reach the culvert during dry weather, the effect of water run-off could carry a spill toward the culvert. This location should be checked for the presence of oil or hazardous substances in the event of a spill so that steps can be taken for containment and clean-up.

8.2 Tank Field

The storage tank area is surrounded with a wall of concrete block. The area within the wall is poured concrete to contain a major spill should it occur by mishap or mechanical failure. Storm water which collects inside the wall of the tank field can be released through a drain line. There is a valve in this drain line which must remain closed at all times except for drainage of storm water. Such drainage will be authorized by plant supervison when it has been determined that opening of the drain valve will not permit the escape of oil or hazardous substances. This valve is locked closed, with only plant supervision having a key.

9.0 STORAGE TANKS

There are 18 tanks in the tank field, ranging in size from 1,500 gallons to 21,000 gallons in capacity. Four 1,500 gallon tanks are welded steel construction used for the storage of Aqua Ammonia. A 12,000 gallon tank of welded aluminum construction is used for storage of Technical Malathion. Seven are of welded steel construction and four tanks are of riveted-welded steel construction. There are two tanks constructed of fiber glass, one to be used for the storage of phosphoric acid and the other not in service. The contents of the tanks are not corrosive to the materials of construction. The tanks are supported on concrete pads.

These tanks are presently judged to be in good condition, with no evidence of wall defects or leakage. The tanks were inspected using a sonic metal gauging device on April 21, 1978 and were found to be sound. A complete report of this inspection is on file.

The bottom valve on each tank is locked closed for security reasons. Only authorized personnel have keys to open them when transfers are made.

10.0 TRANSFER PIPELINES

Transfer of material from tank trucks to tanks is made using hoses that connect the cars to two inch (nominal diameter) steel pipelines. Except for one short buried run of about 20 feet, all lines are above ground, including transfer lines from tanks to formulating equipment in the plant buildings.

Pipes are supported on angle iron brackets and secured with U-bolts. These supports have proven adequate for a number of years, and provide ready access to pipes for inspections and repairs. Any leakage from pipes or pipe fittings should be promptly reported and corrective action taken.

Pipelines from the area of truck unloading to tankage are equipped with both shutoff valves and check valves to prevent back flow through the lines if a transfer hose were to be disconnected accidentally with the shutoff valve open. All personnel are cautioned to make sure that transfer hoses are cleared of oil and that shutoff valves are closed before disconnecting after a transfer.

Transfer of material from tankage to formulating equipment is made by using hoses connected to tank lines and transfer pumps. Tank lines have a valve at the tank and a stainless steel ball valve at the manifold where the hoses are connected. The hoses are equipped with stainless steel ball valves at the point of connection to the tank lines. The other end of the hoses is attached to the suctions of the transfer pumps. The discharge of the transfer pumps is piped solid to the manifold at the formulating area. The pumps are mounted on a concrete slab with curbing and a catchment trench to a sump pump. The sump pump is piped directly to the waste liquid storage tank.

11.0 TANK CAR UNLOADING

Tank car unloading takes place on the rail siding on the east side of the plant buildings. Tank cars can be unloaded directly to the formulating tanks, or to the storage tanks by use of individual pipes and hose connections at the liquid formulating platform. Two cars can be spotted over the spill catchments at this location. The catchment consists of steel trays fitted between the tracks, on the side of the tracks, and between the tracks and the cement slab, along the side of the building. These trays are piped into drains that lead to a sump inside Building "D" near bay door #5. The sump has two pumps that can pump any spilled material to the waste liquid tank, or to one of the three large formulating tanks if a short hose is used. In the event of an uncontrolled leak, the available tankage is sufficient to accommodate well over an entire tank car of material. The rail siding at the unloading area is entirely covered by a roof and outside walls which keep the rain and snowfall from running directly to the sump. The building roofs have gutters and leaders to keep roof run-off from filling the sump in bad weather.

11.0 TANK CAR UNLOADING (continued)

Even though spill catchment is provided, close attention to unloading operations is required to prevent spills. Plant operating standards require personnel to:

1. Make sure cars are properly spotted to be over the catchment.
2. Chock car wheels.
3. Check transfer route to proper tank.
4. Recheck the transfer route after connecting for the transfer.
5. Check available capacity, in process waste tank and back-up tanks.
6. Check liquid level in the waste sump.
7. Check sump pump operation.
8. Start the transfer and immediately observe all connections, hose and piping for leaks. If any leakage occurs, stop the transfer, close valves as required to isolate the leak, and correct the problem. Do not proceed until the problem has been corrected.
9. Frequently observe the connections, hose, and piping for leakage during the transfer.
10. Check that all material has been off-loaded.
11. After completion of transfer make sure all the lines are cleared and drained before disconnecting.
12. Check that manifold and tanker valves are closed.
13. Leave wheel chocks and blue rail sign in place until disconnection is completed and the car is secured for transit with no leakage.

12.0 TANK TRUCK UNLOADING

Tank trucks are unloaded to the storage tanks at a location about 60 feet west of the tank field. The hose connecting points and the tank truck are inside a housed in structure that has a roof and three sides. This shed has a concrete floor with a drain trench its entire length, and another beneath the hose connecting points. The drain trenches are connected to a sump with a pump on level control that discharges into the same system as the rail car spill catchment system. The shed protects the drain system from being over loaded by rain and snowfall.

Precautions to prevent spills during unloading of tank trucks must be taken along the lines prescribed above for tank cars except that:

1. Before making connections make sure that the truck brakes are firmly set, wheels are checked, and stop sign placed in front of truck.

12.0 TANK TRUCK UNLOADING (continued)

2. Do not allow the truck to depart until an inspection has been made for proper disconnection and absence of any leakage.

13.0 CLEAN UP OF SPILLS

Although certain procedures may be applied in principle to the clean-up of spills, the method to be used will depend on the materials, the size of the spill, and the prevailing conditions. A spill during winter weather and snowfall will required treatment in a different manner than a spill during warm or rainy weather.

Plant management has placed the clean-up of a possible spill in the hands of qualified service companies who are available around the clock. Summoning of one or both of these companies will be at the discretion of plant management and supervision.

HAZARDOUS WASTES SPILL

Freehold Cartage
Rt. 33 East
Freehold, New Jersey 07729
Telephone: (201) 364-8200

OIL SPILLS

Clean Venture, Inc.
P. O. Box 418
Linden, New Jersey 07036
Telephone: (201) 225-4130

Guidance in spill containment and clean-up may also be provided through personnel at other locations in the Company. Such assistance should be requested if needed by contacting:

Manager of Environmental Affairs
Chevron Chemcial Company
San Francisco, California
Telephone: (415) 894-3925

The SPCC Plan described herein for the South Plainfield Plant is approved for implementation.

J. H. ECKART, MANAGER OF MANUFACTURING

DATE

December 4, 1980

J. H. Eckart / JBV

I certify that this SPCC Plan has been prepared in accordance with good engineering practices.

G. E. TWITCHELL, P.E.
Registration No. 11429, State of California

DATE

November 26, 1980

G E Twitchell